

Notice of Allowability

Application No.

09/823,154

Applicant(s)

JACOBSON, NEIL G.

Examiner

Dwin M. Craig

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/17/2006.
2. ☒ The allowed claim(s) is/are 1-4, 6-16, 18-25 and 27-28. ³⁵
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>1/17/06</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

And

REASONS FOR ALLOWANCE

1. Claims 1-4, 6-16, 18-25 and 27-³⁵~~28~~ are allowed.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

2.1 While US Patent 6,205,579 *Southgate* discloses remote diagnostics for software, used to program PLD's or (Programmable Logic Devices) and while US Patent 6,047,128 *Zander* discloses remote replacement of software modules in an EEPROM or other storage device, none of these references taken either alone or in combination with the prior art of record disclose, *remotely diagnosing and reconfiguring PLD's or (Programmable Logic Devices)*, which are actual hardware components, specifically including:

(claim 1) "...transmitting diagnostic signals via the access controller to the programmable logic device where the diagnostic signals are received from a network in response to a diagnostic request, the diagnostic control module including logic for collecting output signals generated by the programmable logic device" and "...reconfiguring the programmable logic device."

(claim 13) "...a diagnostic control module for performing a diagnostic test on the programmable logic device in accordance with the diagnostic commands; and a reconfiguration controller in communication with the programmable logic device."

(claim 23) "...transmitting diagnostic commands to the remote electronic system that cause the diagnostic/reconfiguration controller to perform diagnostic tests on the logic device..." and "...receiving the output signals from the remote electronic system over the communications

network;” and “...transmitting reconfiguration commands to the remote electronic system causing the diagnostic/reconfiguration controller to reconfigure the programmable logic device based on the output signals analyzed.”

(claim 29) “...a second interface coupled to the at least one PLD adapted for boundary scan input and output to and from the PLD, wherein the microcontroller is configured to execute first and second software modules, the first software module adapted to apply input and output signals to the at least one PLD responsive to diagnostic control received via the network and transmit output signals from the at least one PLD via the network,” and “...reconfigure the PLD with the configuration data received via the network.”

(claim 32) “...a microcontroller embedded in the device;” and “...storing in a first memory embedded in the device a current configuration data set consistent with states of programmable memory cells that define a logic function implemented by the at least one PLD;” and “...reconfiguring the PLD with the configuration data received via the network.”, in combination with the remaining elements and features of the claimed invention. It is for these reasons that the Applicants’ invention defines over the prior art of record.

2.2 Dependent claims 2-4, 6-12, 14-16, 18-22, 24, 25, 27, 28, 30, 31 and 33-35 are allowed for at least the reasons that they depend from an allowed base claim.

2.3 Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

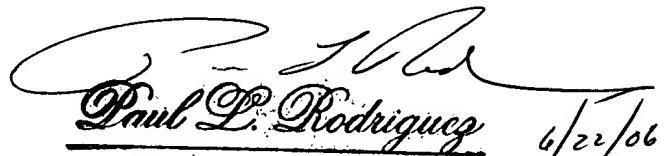
Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DMC


Paul L. Rodriguez 6/22/06
Primary Examiner
Art Unit 2125-2123